

Water Management in Ontario

Ontario
Water Resources
Commission

July 1970

# LAKE ERIE CONTINGENCY PLAN

FOR SPILLS OF

OIL AND OTHER

SEP 1 6 1974

MINISTRY OF THE
ENVIRONMENT

HAZARDOUS MATERIALS



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#### LAKE ERIE CONTINGENCY PLAN

for

# SPILLS OF OIL AND OTHER

HAZARDOUS MATERIALS

ONTARIO WATER RESOURCES COMMISSION

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#### INTRODUCTION

The spill of oil or other hazardous materials, whether originating from vessels, industry, oil and gas drilling operations or other activities involving the handling of these materials, presents a potential danger to the environment. This contingency plan has been developed to provide positive, co-ordinated action for the control, containment and clean-up of these spills.

After consultation with interested parties, the Ontario Water Resources Commission developed the "Lake Erie Contingency Plan for Spills of Oil and Other Hazardous Materials".

Persons working on and about Lake Erie are vitally concerned with this problem and by their presence can perform a very useful role in notifying the ONTARIO OPERATIONS CENTER of observed spills.

#### PURPOSE AND OBJECTIVES

The purpose of the "Lake Erie Contingency Plan for Spills of Oil and Other Hazardous Materials" is to provide a framework for:

- (a) the discovery and reporting of spills,
- (b) alerting and co-ordinating resources including manpower, materials and equipment to control contamination and clean-up spills,
- (c) establishing financial liability and ensuring future compliance with existing regulations.

The plan permits and encourages the development of and close co-ordination with local contingency measures developed by municipalities, industries and others.

This plan will be placed into effect for major spills of oil and other hazardous material which occur in Canadian waters of Lake Erie. These spills should be reported through the alerting system described in this contingency plan.

#### RESPONSIBILITIES

(i) Ontario Water Resources Commission (OWRC)

The Ontario Water Resources Commission is responsible for pollution abatement in the Province and has taken the lead role in the development of a multi-agency plan to deal with spills on Lake Erie.

The responsibilities of the Commission in the Lake

Erie Contingency Plan will be:

- to undertake the command in the event of a major spill,
- to maintain the ONTARIO OPERATIONS CENTER
   to which all spills are reported,
- to provide technical advice on aspects of water pollution,
- to alert all water users who may be affected by a spill.
- to provide co-ordination with other affected provincial and municipal agencies,
- to carry out a continuous evaluation of chemicals and other equipment for use in controlling and containing oil spills and distribute this information to interested parties.

## (ii) Ontario Department of Mines and Northern Affairs

Through its Petroleum Resources Section, the

Department of Mines and Northern Affairs administers the regulation of exploration and drilling procedures, licences and
inspection drilling and production facilities in Ontario,
including Lake Erie.

The responsibilities of the department in the Lake Erie Contingency Plan will be:

- to provide the on-scene command in the event of a small spill from an oil and gas well drilling operation,
- to provide technical expertise with respect to oil and gas well drilling operations,
- to alert oil and gas well drilling operators in the vicinity of an oil spill.

## (iii) Ontario Department of Lands and Forests (ODL&F)

The Fish and Wildlife Branch of the Department of Lands and Forests is responsible for the regulations respecting the fisheries, both commercial and recreational on Lake Erie. The Department also operates a Fisheries Research Station at Wheatley in Western Lake Erie.

In its activities on Lake Erie, the Department's responsibilities include:

- the provision of information related to the fisheries in the lake,
- maintaining contact with commercial fishermen,
- the provision of guidance and assistance in the protection of fish and wildlife.

#### (iv) Other Provincial Government Departments

- (a) Ontario Provincial Police (OPP)
  - to provide emergency communications
     as required.

## (b) Ontario Department of Highways (ODH)

 to provide equipment in the form of mulchers and straw as may be required.

## (v) Canada Department of Transport (CDOT)

The Department of Transport administers the Oil
Pollution Regulations under the Canada Shipping Act. The
Department has power to take action to prevent pollution
that may be caused by the release of the cargo or fuel from
a ship in distress. The act also contains provisions prohibiting the pollution of water by oil discharged from a
ship and the provisions for prosecution of the offending

party. The Department also maintains a fleet of coast guard vessels on the Great Lakes as well as helicopters and fixed-wing aircraft to enforce the provisions of the act during the navigational season.

Under the proposed Federal Contingency Plan for control of spills form shipping, the Canada Department of Transport provides the on-scene command in the event of a vessel disaster.

#### ONTARIO OPERATIONS CENTER

The Ontario Operations Center is located within the Water Quality Surveys Branch of the Ontario Water Resources Commission at 135 St. Clair Avenue West. The co-ordinator for oil spills will be Mr. N. Vanderkooy with Mr. S.E. Salbach and Mr. K. Shikaze as alternates.

Functions of the Operations Center are as follows:

- to act as the focal point for all reports concerning the spill of oil and other hazardous materials,
- to maintain up-to-date technical information on oil spills,
- to maintain an inventory of materials,
   chemicals, etc. to be used for control
   of oil spills,
- to advise other agencies and persons who may be affected by a spill.
- to implement the Lake Erie Contingency Plan.

  In the event of implementation of the Lake Erie Contingency
  Plan, the Operations Center will be manned 24 hours a day
  and will provide the following:
  - continuous communication with the Lake

    Erie Operations Team.

- co-ordination of any other action required,
- act in co-operation with public relations
   representatives of the agencies involved
   as the focal point for information releases
   concerning the spill.
- N.B.: It should be noted that operational control shall not originate from the Operations Center unless specifically requested by the On-Scene Commander.

#### ON-SCENE CO-ORDINATION

The command responsibilities for the co-ordination and direction of the pollution control activities at the scene of a spill of oil or other pollutional materials will be directed by an On-Scene Commander. It will be his responsibility to implement as quickly and efficiently as possible the Lake Erie Contingency Plan so that the pollution effects of the spill can be kept to a minimum. The Ontario Water Resources Commission will provide the On-Scene Commander for the Lake Erie Contingency Plan unless the nature and source of the spill warrants otherwise.

- 1. In the event of a spill of oil or other hazardous materials, the first government official at either the provincial or federal level (DOT) or industry official representing the party responsible for the spill on the scene will assume the co-ordination activities under this plan until the predesignated On-Scene Commander arrives to assume command. In the event of a major oil spill resulting from a vessel, the Great Lakes On-Scene Commander will be from the Canada Dept. of Transport and will assume responsibility in accordance with the federal contingency plan.
- 2. The On-Scene Commander shall determine pertinent facts about a particular incident such as the nature, amount

and location of material spilled, probable direction and time of travel of the material, resources and installations which may be affected and the priorities for protecting them.

- 4. The On-Scene Commander shall call upon and direct the deployment of needed resources in accordance with this plan to initiate and continue containment, counter-measures, clean-up, restoration and disposal functions.
- 5. In implementing this plan, the On-Scene Commander will report to and co-ordinate closely with the Lake Erie Operations Team to ensure the maximum effectiveness of the activities in protecting the natural resources and environment from pollution damage.
- 6. The On-Scene Commander shall, with the assistance from the Lake Erie Operations Team, make regular reports to the ONTARIO OPERATIONS CENTER.

#### LAKE ERIE OPERATIONS TEAM

The Lake Erie Operations Team is the on-site

Technical Team which will be activated upon implementation
of the Lake Erie Contingency Plan. It will usually consist
of representatives of the Ontario Water Resources Commission,
Ontario Department of Mines and Northern Affairs, Ontario
Department of Lands and Forests, Canada Department of Transport, Ontario Provincial Police and other government agencies
and industry as required. The first representative from each
of these agencies automatically becomes a member of the Lake
Erie Operations Team and remains on the team until such time
as a more senior member of that agency arrives.

In the Lake Erie Contingency Plan, the functions of the Lake Erie Operations Team will be to:

- serve as the emergency advisory team on the scene of the spill,
- establish a communication link with the OPERATIONS CENTER,
- review and evaluate situations and reports
   received from the On-Scene Commander.
- advise the On-Scene Commander of applicable control techniques, available materials, manpower and otherwise respond to needs of the On-Scene Commander.

- provide advice to the On-Scene Commander relative to public health, safety, security, navigation, oil and gas drilling, fish and continuing water pollution control techniques.
- prepare reports for forwarding to the OPERATIONS CENTER, as may be directed by the On-Scene Commander.

#### TECHNICAL LIAISON

From time to time technical information exchanges, possibly in the form of seminars, meetings, etc. will be organized by the Ontario Water Resources Commission.

The objectives of these information exchanges will be to review:

- techniques for containment and removal of oil and hazardous material,
- provide information for the development
   of local contingency plans,
- exchange information on available resources.

# APPENDIX I

RESPONSE PHASES

#### APPENDIX I

#### RESPONSE PHASES

The actions taken to combat a spill can be separated into four distinct phases. These are: Phase I - Discovery and Notification; Phase II - Containment and Countermeasures; Phase III - Clean-up, Restoration and Disposal, and Phase IV - Recovery of Damages and Enforcement.

#### PHASE I

Discovery and Notification are the first response actions to spills. Discovery of a spill may be as a result from deliverate searching procedures or by random discovery as outlined in the section entitled "Surveillance" (Appendix II).

All spills should be reported to the <u>ONTARIO</u>

<u>OPERATIONS CENTER</u> where a review of the details of the spill will be made and further required action determined (see Appendix III).

#### PHASE II

Containment and Countermeasures are defensive responses to be initiated as soon as possible after discovery and notification of a spill. Depending on the circumstances, these may include the placing of physical barriers to control the spread

of oil, the placement of booms or barriers to protect onshore areas, and the use of dispersants, sorbents, gelling or burning agents or other materials to mitigate the effects of a spill.

#### PHASE III

Clean-up, Restoration and Disposal include those actions taken to remove the oil from the water such as the collection of oil through the use of sorbents, skimmers or other collection devices to restore the environment to its natural state and to safely dispose of oil which is recovered in the clean-up and restoration phase.

#### PHASE IV

Recovery of Damages and Enforcement will include a variety of activities depending on the location and circumstances. An essential aspect of this phase is the collection of samples and other data as quickly as possible to substantiate the source for later recovery of damages. (Also see Appendix VII).

Note: For further details contact the ONTARIO OPERATIONS CENTER.

APPENDIX II

**SURVEILLANCE** 

#### APPENDIX II

#### SURVEILLANCE

Spills of oil and other hazardous materials should not be permitted to occur. However, accidents are possible and when such incidents do occur, the responsible party is often reluctant to report the details immediately. Therefore, it is desirable for all agencies and persons carrying out activities on the lake to maintain an awareness of possible sources of oil and other hazardous material and the system of notification to be followed in the event of a spill. The following agencies, persons, etc., constitute sources of surveillance on Lake Erie:

- I Provincial Agencies
- (a) Ontario Water Resources Commission
  - survey vessels
  - periodic aerial surveillance
- (b) Ontario Dept. of Mines and Northern Affairs
  - oil and gas well drilling inspectors
- (c) Ontario Dept. of Lands and Forests
  - research vessels

#### II Federal Agencies

- (a) Department of Transport
  - coast guard
  - periodic aerial surveillance
- (b) Canada Centre for Inland Waters
  - research vessels
- III United States Agencies
- (a) U.S. Coast Guard
- (b) U.S. Corps. of Engineers
- (c) FWQA
- (d) State Agencies Michigan, Ohio, Pennsylvania, New York
  - IV Shipping Industry
  - V Fishing Industry
    - operates out of Port Dover, Wheatley and Erieau
  - VI Oil and Gas Well Drilling Industry
- VII Waterworks Operators
- VIII Public-at-large
  - pleasure boaters
  - fishermen

- IX Shore-based Industry
- X Harbour Boards and Commissions

APPENDIX III

NOTIFICATION

#### APPENDIX III

#### NOTIFICATION

All spills of oil and pollutional materials on Lake

Erie shall be reported immediately to the ONTARIO OPERATIONS

CENTER, Ontario Water Resources Commission.

During Office Hours: 8:30 AM - 4:45 PM

8:15 AM - 4:30 PM July and August

Telephone - (416) 365-6954 Mr. N. Vanderkooy Mr. S.E. Salbach (416) 365-6975 Mr. K. Shikaze

#### After Office Hours:

Telephone - (416) 363-1211 Queen's Park Operator

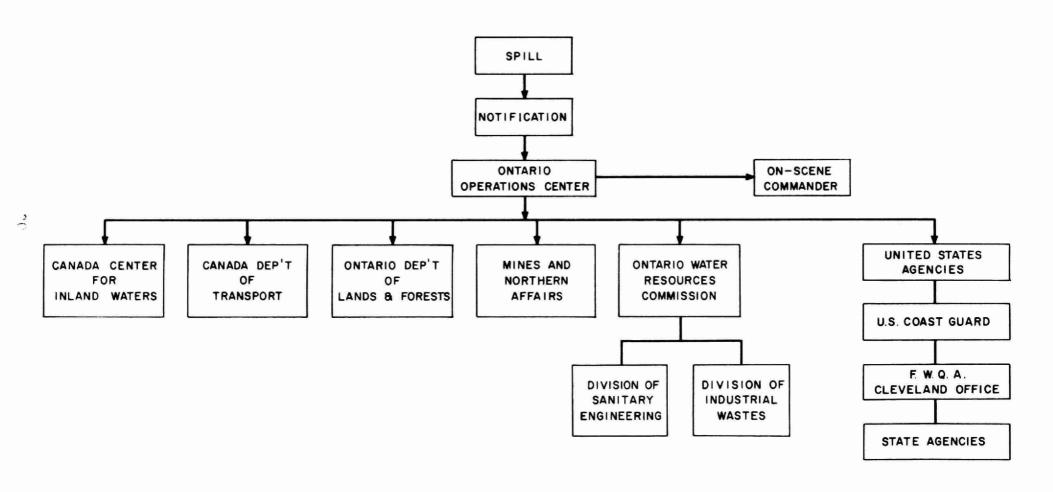
NOTE: Queen's Park Operator is on duty 24 hours and has a list of OWRC staff to be contacted when a spill is reported. When contacting Oueen's Park Operator, caller should give name and telephone number at which he can be called by OWRC staff.

Upon notification and determination of the extent of a spill and whether it will require the placing into effect of the Lake Erie Contingency Plan, the OPERATIONS CENTER will then contact other agencies who may be concerned or may become involved. If a major spill is indicated, representation from each agency will be required for the Lake Erie Operations Team to provide the advisory services within the Contingency Plan.

# APPENDIX IV

ALERTING PROCEDURE

# APPENDIX IV ALERTING PROCEDURE LAKE ERIE CONTINGENCY PLAN



# APPENDIX V

# PROCEDURE FOR REPORTING INFORMATION

and

COLLECTING SAMPLES

#### APPENDIX V

# PROCEDURE FOR REPORTING INFORMATION AND COLLECTING SAMPLES

In the event of any spill, it is essential that factual information on the spill, as well as representative samples be collected for later use in clean-up cost recovery, damage recovery and in enforcement actions.

# A. INVESTIGATION & REPORTING (See Action Sheet, Appendix VI and VII)

- investigate all observed and reported spills,
- collect samples of oil from water and from all suspected sources of the spill,
- interview witnesses and obtain names,
- prepare a report on personal findings and observations of others,
- submit reports of spill to ONTARIO OPERATIONS
  CENTER.

#### B. SAMPLE COLLECTION

I Several precautions must be taken when collecting and handling liquid samples for analyses. The character of a sample may be affected by the following conditions:

(a) the composition and cleanliness of the container

# APPENDIX VI

# ACTION SHEET

for

OIL SPILLS ON LAKE ERIE

- (b) manner in which the sample is taken
- (c) time lapse before analyses

III In taking samples, the following procedures should be followed:

- (a) glass or stainless steel containers of at least one quart size should be used. Plastic containers with the exception of teflon have been found to absorb organic materials from water. In other cases, compounds have been dissolved from plastic containers. This comment also applies to bottle cap liners. The portion of the cap liner which may come into contact with the sample in the container should be made of glass, aluminum foil or teflon.
- (b) clean new containers are preferred, although containers that have been cleaned with a strong detergent, thoroughly rinsed and dried may be used.
- (c) samples must be properly labelled, e.g. name of person who collected the sample, time, location, etc.

- (d) as large a sample as possible of the oil (at least 10 ml of concentrated oil) should be taken to enable the chemist to conduct all the necessary analytical tests. Skimming techniques should be employed to obtain a sufficient amount of oil for analysis.
- (e) when water is polluted, it is not unusual for the polluting condition to change rapidly. Representative samples should be taken with the time sequence and place appropriately noted.
- (e) Samples should be refrigerated and delivered to the OWRC Laboratories, Hwy. 401 and Islington with a minimum of delay.

maintained and recorded from the time the samples are taken until it is produced as court evidence. In this regard, a record of time, place, name and title of persons taking the samples, names of witnesses and each person handling same thereafter must be maintained and forwarded with the sample.

#### APPENDIX VI

#### ACTION SHEET

for

#### OIL SPILLS ON LAKE ERIE

In the event of an occurrence, observation or upon notification of an oil spill, contact immediately;

(a) During Office Hours: 8:30 AM - 4:45 PM 8:15 AM - 4:30 PM July and August

#### ONTARIO OPERATIONS CENTER

- 1. Mr. N. Vanderkooy (416) 365-6954
- 2. Mr. S.E. Salbach (416) 365-6954
- 3. Mr. K. Shikaze (416) 365-6975
- (b) During Off-office Hours:

Queen's Park Operator (416) 363-1211

In situation (b), caller should give name and telephone number at which he can be reached.

Caller should obtain as much information as possible concerning the spill - see the attached FACT SHEET which should be used as a guide.

#### FACT SHEET

for

Oil Spills on Lake Erie

As much of the following information as possible should be obtained prior to reporting a spill to the Ontario Operations Centre.

Time of observation of spill
Probable source of spill
Probable time of spill
Location of spill
Nature of material spilled
Probable volume of spill
Probable duration of spill
Size of oil slick
Movement of oil slick
Weather and lake conditions
Action being taken to

- control spill
- contain spill

Personnel on the scene of spill

## LAKE ERIE CONTINGENCY PLAN

In the event of an oil or hazardous material spill, the ONTARIO OPERATIONS CENTER, Ontario Water Resources Commission, should be immediately notified by calling: 416-365-6954. After office hours, contact QUEEN'S PARK OPERATOR: 416-363-1211.

The following personnel may be involved in the event of an oil or hazardous material spill:

## ONTARIO WATER RESOURCES COMMISSION

Water Quality Surveys Branch	Office Phone	Home Phone
Mr. S. Salbach - Program Engineer	416-365-6954	416-267-2486 Toronto
Mr. N. Vanderkooy- Technologist	416-365-6954	416-459-8610 Bramalea
Mr. W.A. Steggles- Supervisor	416-365-6954	416-769-6880 Tor
Industrial Wastes Division	Office Phone	Home Phone
Mr. R. Gotts - District Engineer - Southwest Ontario	416-365-6346	416-751-0714 Toronto
Mr. R.W. Hussain - Engineer - London Office	519-433-3961	519-471-7860 London
Mr. R.C. Stewart - District Engineer - West Central Ontario	416-365-6346	416-451-8226 Brampton
Mr. K. Shikaze - Program Engineer	416-365-6975	416-293-2847 Agincourt
Mr. F.R. Phoenix - Supervisor - Field Services Branch	416-365-6346	416-640-1103 Stouffville
District Engineers Branch	Office Phone	Home Phone
Mr. J. Timko - District Engineer - Southwest Ontario	416-365-1655	416-274-6374 Port Credit
Mr. J. Moore - Engineer - London Office	519-433-3961	519-471-3375 London
Mr. R. MacMurray - District Engineer - West Central Ontario	416-365-1655	416-854-2613 Campbellville
Mr. G.H. Kay - Supervisor - District Engineers Branch	416-365-6971	416-278-6883 Port Credit

# ONTARIO DEPARTMENT OF MINES AND NORTHERN AFFAIRS

ONTARIO DEPARTMENT OF MINES AND NORTHERN AFFAIRS			
Petroleum Resources		Office Phone	Home Phone
Mr. D.A. Sharp -	Supervisor	416-365-1981	416-921-6768
Mr. D.D. McLean -	Reservoir Engineer	416-365-1983	416-489-0872
ONTARIO DEPARTMENT LANDS AND FORESTS			
	Branch Chief Fish and Wildlife Br		416-293-4378 Toronto
	Supervisor Fisheries Section	416-365-4251	416-483-6756 Toronto
Mr. W.B.M. Clarke -	District Forester Aylmer	519-773-9241	519-773-9241 Aylmer
CA	NADIAN CENTER FOR INI	AND WATERS	
Dr. A.R. LeFeuvre	Environmental Quality Co-ordinator	416-632-1940	416-634-2437 Burlington
DEPARTMENT OF TRANSPORT Steamship Inspection			
Mr. A.C. Parkinson	Steamship Inspector	416-369-4605	416-637-6160
Mr. D.R. Weaver	Senior Steamship Inspector	416-369-4605	416-277-6463
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION			
Lake Erie Basin Office (Cleveland)			
	(Cleveland)	216-522-4876	216-777-9080
Mr. G. Harlow	)		216-561-8078
Mr. A. Smith		216-522-4876	210-301-0070
U.S. COAST GUARD OFFICE			
District Office, Cleve	land - Commander, Ninth Coast Gu -27-	ard District	Day Phone 216-522-3950 Night Phone 216-522-3983

# APPENDIX VII

FINANCIAL RESPONSIBILITY

## APPENDIX VII

# FINANCIAL RESPONSIBILITY

The removal of the pollutant from the water, the restoration of the environment to its prespill conditions, and the disposal of the pollutants recovered in clean-up and restoration are the primary responsibility of the polluter. Collection of samples and necessary supporting information will be made by the OWRC to determine the source and extent of the damages.

In the event the source of the spill cannot be determined or the person or persons responsible are unwilling or unable to effectively carry out the necessary clean-up operations, the ONTARIO OPERATIONS CENTER will mobilize facilities and personnel to clean-up, restore and dispose of the pollutant. The costs of the operation will be charged to the person or persons who discharged or deposited the polluting material.

# APPENDIX VIII

CHEMICAL TREATMENT OF SPILLS

#### APPENDIX VIII

## CHEMICAL TREATMENT OF SPILLS

#### GENERAL

The objective of adequate oil spill pollution control is to minimize the short term and long term effects. preferably achieved by removing the oil. The elimination of visible evidence through the use of dispersants or sinking agents does not necessarily achieve this, and in many cases, may be the direct cause of environmental damage. oil generally has a limited effect on water supplies and fish life, unless it is brought into the water mass through the use of chemicals and sinking agents and is likely to be ingested by fish, foul commercial fishing gear, smother bottom organisms and damage spawning grounds. Most dispersing agents are also toxic in varying degrees and thus exert an additional danger to aquatic life and water supplies. When applied to beaches, dispersants promote the penetration of oil into the sand, thus making removal more difficult.

Other materials or chemicals in use are sorbing, gelling and burning agents.

Sorbents are oil attracting and water repelling materials and include straw, hay, peatmoss, saw-dust, polymers, plastics and foam rubber products. They are

generally not soluble and are not likely to increase the damage caused by the oil. Their main purpose is to limit the rate of slick spreading and facilitate clean-up.

Agents which will form a gell with oil and thereby prevent the oil from spreading further are under development. Therefore, the possible toxic effects of gelling agents is not known at present.

Oil is difficult to burn on the water surface, particularly after the more volatile fractions have evaporated. A number of products are available which under specific circumstances will promote and sustain burning. The danger of air pollution and difficulty of controlling the burning oil mass usually precludes the use of this method along shorelines, in harbours and adjacent to other marine facilities.

# GUIDELINES TO THE USE OF CHEMICALS

In view of their potential hazard to the environment chemicals which disperse, emulsify, solubilize, precipitate or sink oil should only be used in consultation with the ONTARIO OPERATIONS CENTER unless it is judged that fire or safety hazards require the immediate application of such chemicals.

Generally, the use of chemicals will not be permitted in the vicinity of a) water supplies (see Figure 1 for

location of municipal and industrial water intakes): b) beach and recreational areas (see Figure 2): c) spawning and fishing areas (see Figure 3 A,B). Exceptions may be made where protection of waterfowl is judged to be of primary importance, or for the removal of a very light local film which may be present following mechanical removal of floating oil. In the latter circumstances, only those compounds exhibiting minimum toxicity toward the aquatic flora and fauna should be used.

# APPENDIX IX

RESEARCH

## APPENDIX IX

## RESEARCH

# (i) Canada Centre for Inland Waters (CCIW)

The Canada Centre for Inland Waters is an interdisciplinary centre for water studies in Canada. It is being developed by three Federal departments, Energy Mines and Resources (EMR), Fisheries and Forestry (Fisheries Research Board), and National Health and Welfare, and the university community. Current activities at the centre are focussed on research on the Great Lakes. A number of research vessels operate from the centre as part of the research program.

# (ii) Ontario Water Resources Commission

Under the Division of Research, staff are continually compiling data and evaluating various chemicals and materials which are commercially available for cleaning up oil spills.

# APPENDIX X

LAKE ERIE

WATER USERS

# LAKE ERIE

# CONTINGENCY PLAN

# MUNICIPAL WATER SUPPLY

# PERSONNEL TO CONTACT

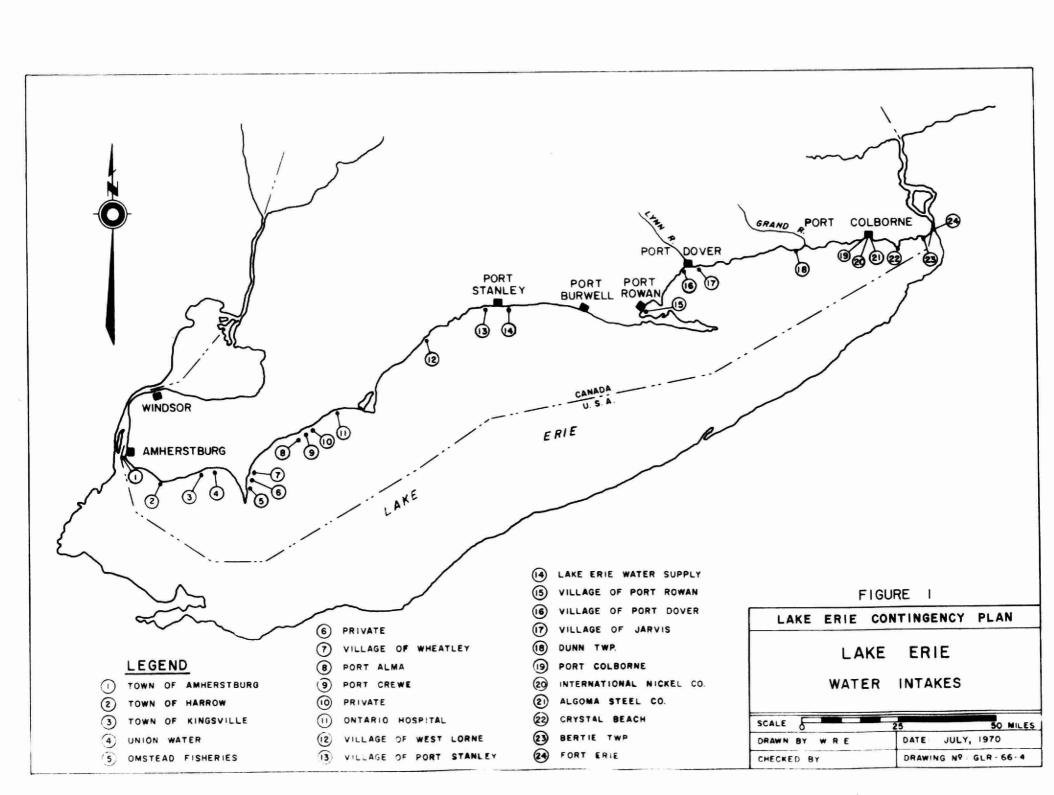
Location of Water Works	Phone Number	Persons to Contact
Town of Amherstburg	Allied Chemical - 736-2111 Home - 969-6675	Mike Paraschak Operator
Town of Harrow	Pumphouse - 738-2284 Home - 738-4194	Charlie Hawkins B.E. Baltzer
Town of Kingsville	Clerk - 738-2523  Plant - 733-4411  P.U.C 733-4132	(after hours) Mr. M. Wigle
Union Water System (Ruthven)	Plant - 326-4447	Harold Sanger <u>or</u> Bill Allsop
Village of Wheatley	Pumphouse - 825-4183 P.U.C 825-4211 Home - 825-4376	Jim Arnew Robert Mills
Village of West Lorne	Pumphouse - 768-1820 P.U.C 768-1880 Home - 768-1183	E. Brown K. H. Phoenix
Village of Port Stanley	Pumphouse - 782-3251 P.U.C 782-3940 Home - 782-3940	Howard Berry
Village of Port Dover	Pumphouse - 583-1930 P.U.C 583-1632 Home - 583-0244	R. Barry D. Simpson
Village of Port Rowan	Pumphouse - 586-2113 P.U.C 586-2113	P. Baese H. Hammond
Lake Erie Water Supply (Twp. of Yarmouth)	Pumphouse - 631-3680 Manager - 433-3961 Home - 439-4836	Reg Walters Alan Ladbrooke

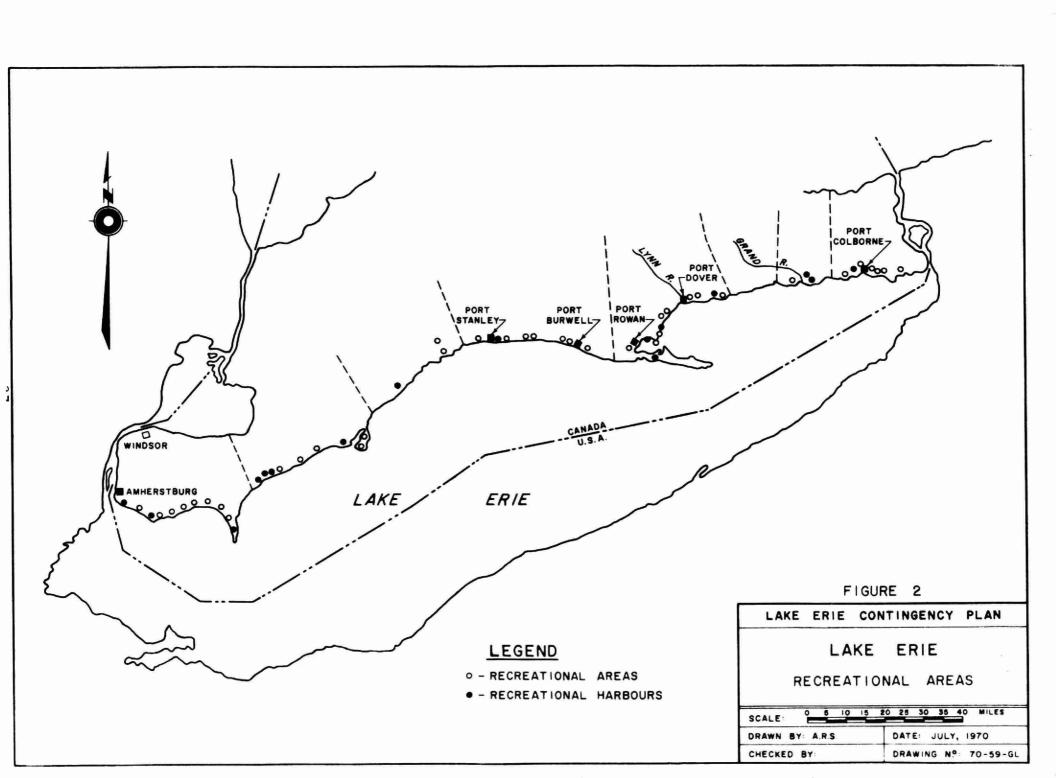
# PRIVATE INDUSTRIAL WATER SUPPLY

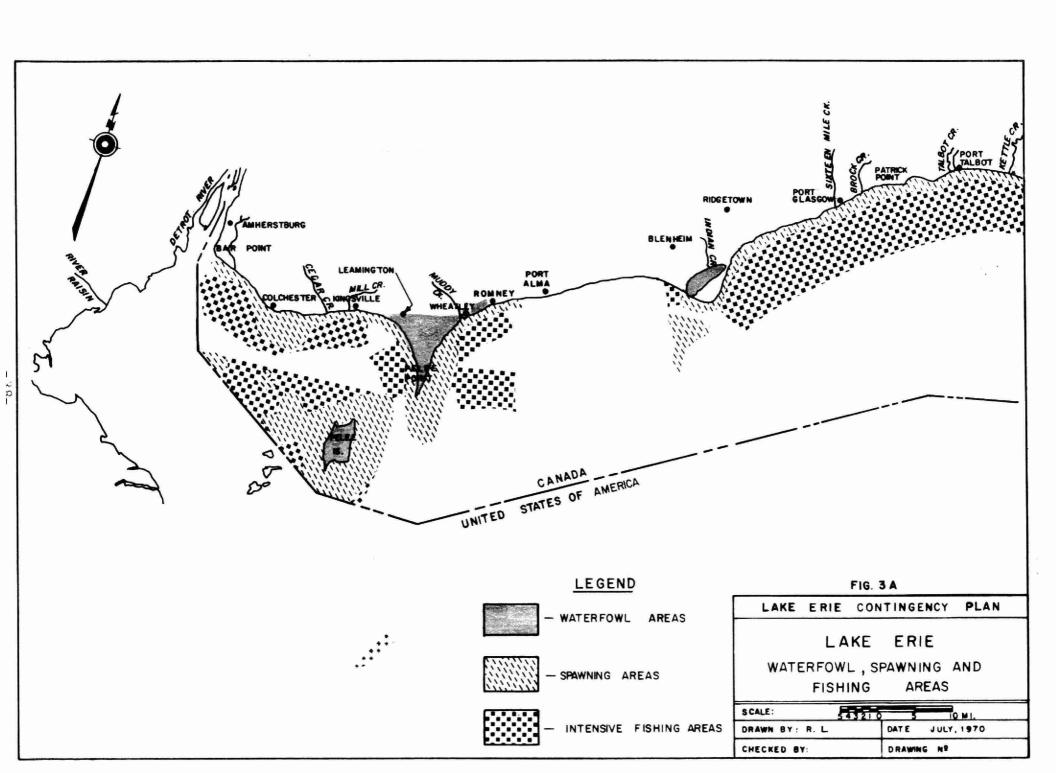
INDUSTRY	PERSON TO CONTACT	PHONE
H. J. Heinz Co. of Canada	Mr. R. B. Marshall	519-326-5701
Omstead Fisheries 1961 Ltd.	Mr. R. Omstead	519-825-4611
International Nickel Company Ltd.	Mr. W. B. Banker	416-834-3611
Algoma Steel Corp. Ltd.	Mr. R. Fabbio	416-835-1103
Private, Mersea Twp.	Mr. Myronyk	519-826-7167
Union Gas, Port Alma		519-689-4297
Erie Canners		519-689-4252
Port Crewe	Mr. G. E. Crew	519-689-4889

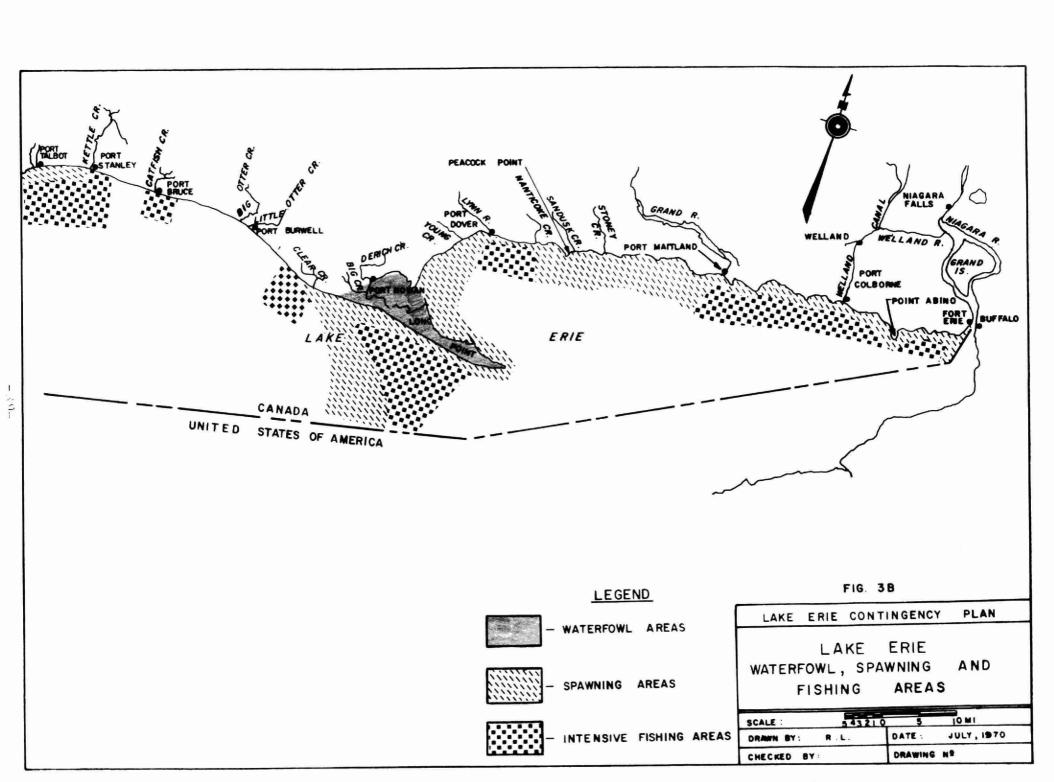
# Lake Erie

Location of Water Works	Phone Number	Persons to Contact
Dunn Twp.	Plant - 774-6311 Home - 774-4608	R. Neff, Operator
Port Colborne (Welland Canal near inlet from Lake Erie)	Pumphouse - 834-3363 Home - 834-9475	J. Farbiak
Crystal Beach	W.W 869-2850 Home - 869-3405	C. Wood
Fort Erie	Pumphouse - 871-1605 Home - 871-1207	G. Rose
Bertie Twp.	Plant - 871-3551 Home - 871-0303	Wilf Vye
Village of Jarvis	Plant - 587-2611 Home - 587-2694	R. Reynolds, Foreman









# APPENDIX XI

# ONTARIO OPERATIONS CENTER

INVENTORY OF EQUIPMENT

for

CONTAINMENT AND CLEAN-UP

OF OIL SPILLS

April 1970

#### BOOMS

#### TORONTO

- A. Toronto Harbour Commission Three oil slick bars 500-200-300 ft. length. 6" floats and 8" fin.
- B. Canadian National RailwayOne oil slick bar 100 ft. length.4" float and 6" fin.
- C. Western Lake Ontario Refineries
  Two TT booms 164 ft. length 1' freeboard 2' skirt
  Shift supervisor Shell Canada Ltd. 416-923-2481.

#### SARNIA

- A. Imperial Oil Enterprises Ltd. Shift Superintendent 519-337-8221 One 164' TT boom 24" skirt and 12" freeboard. One oil slick bar 100'.
- B. Shell Canada Ltd.
  Shift Superintendent 519-862-1491.
  One oil slick bar 130'.

#### CHEMICALS

#### TORONTO

- A. Esso Chemicals stockpile Correxit Contact 416-638-1010, off-hour contact customer service.
- 2. Lake Erie Operators
  - A. All drilling platform equipped with dispersants, hoses and nozzles to handle minor slicks.

#### SARNIA

A. Imperial Oil Enterprises Ltd. Phone 519-337-8221 45 gal. drums Correxit 7664

## ABSORBANTS, STRAW, HAY, SAWDUST, ETC.

#### TORONTO

- A. Department of Highways (Maintenance Engineer, Mr. E.J. Orr Office 416-365-3665, home 416-249-1147) can advise on location of straw and 18 straw Mulch Blower in Ontario, also contact for private stockpiles of straw.
- B. Directory of Wood-Using Industries listing locations of possible stockpiles of sawdust log booms, etc. The directory is published by Department of Lands and Forests and is available at Central Operations Center.

## SKIMMERS AND VACUUM TRUCKS

#### SARNIA

- A. Shell Canada Ltd.
  Contact Mr. T. Barry 419-862-1491
  One floatation skimmer, require pump or vacuum truck to operate.
- B. Imperial Oil Enterprises Ltd., shift superintendent 519-337-8221, 2 floating type skimmers equipped with 50 ft. hose and with electric or gas driven pump. 1 vacuum truck.
- C. The following municipalities employ vacuum trucks for cleaning operations: Niagara Falls, Kitchener, London and Blenheim and also Sterling Fuels Ltd. in Port Stanley.

## **MISCELLANEOUS**

#### SARNIA

A. Imperial Oil Enterprises Ltd. 25 ft. boat equipped with two 500 gpm Chrysler Industrial water pumps and two Fire Monitors for correxit application.

#### AYLMER

A. Department Lands and Forests 519-773-9241 Mr. W.B.M. Clarke 10 vessels ranging 16 to 45 ft. length equipped with 50 to 150 h.p. motors.

#### TORONTO

A. Ontario Water Resources Commission. Mr. S.E. Salbach, Program Engineer Great Lakes Surveys Program. 365-6954

## MONITOR I

19' Neptune Cruiser will be operating in St. Lawrence, Niagara and St. Marys rivers. Is equipped with trailer. Maximum speed 25 knots. Cruising speed 18 knots.

## MONITOR II

28' Georgian steel hull cruiser.
Maximum speed 25 knots, cruises at 20 knots.
Will operate in Detroit and St. Clair rivers.

## MONITOR III

62' steel hull cruiser.
Maximum speed 12 knots, cruising speed 8 knots.
Will operate in Lake Ontario and Lake Erie.

B. Ontario Provincial Police Equipment available to provide initial communications, arrangements should be made through Central Operations Center.

#### BURLINGTON

A. CCIW, Dr. LeFeuvre 416-632-1940 For use of vessel refer to listing on size, power and location at Ontario Operations Center.

# APPENDIX XII

# NINTH U.S. COAST GUARD DISTRICT

INVENTORY OF EQUIPMENT

for

CONTAINMENT AND CLEAN-UP

OF OIL SPILLS

February 1970

#### BOOMS

## COTP OSWEGO ZONE

A. St. Lawrence Seaway Development Corporation, Messena, New York 1000 feet floating plastic oil boom (slickbar)

#### COTP BUFFALO ZONE

- A. Department of Public Works, Buffalo, New York One 370' plastic oil boomm 6" diameter float 18" skirt (slickbar)
- B. Republic Steel Corporation, Buffalo, New York
  One 200' plastic oil boom, 6" diameter float 18" skirt (slickbar)
- C. Erie County Public Works Department, Buffalo, New York One 350' plastic oil boom, 6" diameter float 6" skirt (slickbar)
- D. Bethlehem Steel Corporation, Buffalo, New York One 150' plastic oil boom, 6" diameter float 6" skirt (slickbar)
- E. Port Authority, Rochester, New York
  One 1000' plastic oil boom, 4" diameter float 6" skirt (slickbar)
- F. Mobile Oil Company, Buffalo, New York 390' of plastic oil boom (slickbar) 6" float, 6" skirt
- G. Ashland Oil Co., Tonawanda, New York 100' of plastic oil boom (slickbar) 6" float, 6" skirt

#### COTP CLEVELAND ZONE

A. Harbor Master/COTP CLEVELAND, Tel: 522-4409/694-3256 1000' (slickbar)

#### 4. COTP DETROIT ZONE

- A. Mobile Oil Company, West Allen Road, Trenton, Michigan 100' section slickbar floating plastic oil 10' fin, standard weight Mobil has ordered 500' of same type boom
- B. Standard Oil Company, Ft. of Wilder Road, P.O. Box 38,Bay City, Michigan200' section slickbar 6" fin, standard weight
- C. Dow Chemical Co., 4868 Wilder Road, Bay City, Michigan 2500' slickbar in 100' section For information, Dow Chemical, Midland, Michigan has a complete fire department with capabilities of oil removal under Chief Earl Forten. Dow also produces in Midland all components that are used in making standard slickbars

- D. Ford Motor Company, 3001 Miller Road, Dearborn, Michigan 600' English Warne type booms in 100' sections maintained in place at Ford River Rouge Plant.

  One Standard Oil make skimmer maintained at Ford River Rouge Plant.
- E. Marine Pollution Control Corp., 214 Randolph St. Detroit, Mich. 200' section slick bar 6" fin, standard weight
- F. Ford Motor Co., 3001 Miller Road, Dearborn, Mich. 100' section slickbar floating plastic oil boom 4" float, 6" fin weighted for 2 \( \frac{1}{2} \) knot current

#### COTP CHICAGO ZONE

A. American Oil Co., Riley Road and Indiana Harbor Ship Canal, East Chicago, Ind. Phone: Mr. Windhauser: 219-659-2700, Ext 217 or 216. Day: FTS 219-932-5500. Nights and Weekends: 219-397-4039 (if no answer, call 219-659-2700 Ext 343). One 6" by 250'; two 6" by 500' booms

B. Bethlehem Steel Corp., Burns Harbor, Indiana Phone: 219-652-2120 FTS 219-886-2411 One 8" by 150' boom.

C. Cities Service, Columbus Drive, East Chicago, Indiana
Phone: Mr. Stover 219-397-6560 Ext 342
Mr. Knight 219-397-6560 Ext 253
FTS 219-932-5500
Nights and Weekends: 219-397-6560 (Ask for foreman)
One 4" by 350' boom.

- D. Globe Oil and Refining Co., Willow Springs, Illinois Phone: 312-839-5220 One 6" by 30' boom.
- E. Inland Steel Co., East Chicago, Illinois Phone: Mr. J. Kapitan (Fire Chief): 219-397-2300 Ext 2035 FTS 219-932-5500 Two 6" by 200' Booms
- F. Mobil Oil Co., 3821 Indianapolis Blvd., East Chicago, Indiana Phone: Mr. Murray: 219-397-1950
  FTS: 219-932-5500
  Nights and Weekends 219-397-1950 (Ask for foreman)
  One 4" x 250' boom One 4" x 350' boom
- One 4" x 250' boom, One 4" x 350' boom

G. Pure Oil Co., Lemont, Illinois Phone: 312-257-2201

Four 6" x 100' booms

H. Phillips Pipeline Co., 400 East Columbus Dr., East Chicago, Indiana Phone: Mr. Staton 219-397-6666

FTS 219-932-5500

Nights and Weekends 219-397-6666 (ask for

operator leadman)

One 4" x 350' (trailer mounted)

I. Shell Oil Co., Columbus Dr., East Chicago, Indiana

Phone: Mr. Austin 219-845-4502

FTS 219-932-5500

One 4" x 250' Boom

J. Sinclair Refining Co., 3500 Indianapolis Blvd., East Chicago, Indiana Phone: 219-397-0924 (ask for shift foreman)

FTS 219-932-5500

Two 4" x 350' booms one is semi permanently installed

K. Texaco Co., 3600 Canal St., Indiana

Phone: Mr. Eaton 219-397-0908

FTS 219-932-5500

Nights and Weekends 219-838-8881

One 4" x 400' Boom

L. Texaco Inc., Lockport, Illinois

Phone: 815-838-0770 One 8" x 100' Boom

M. Humble Oil and Refining Co., 3301 South California Ave.,

Chicago, Ill.

Phone: Mr. Game, Supt. (312) 523-8100

Night Phone: (312) 247-2615 One 4" by 100' Boom, 175 lbs

N. Sinclair Oil Terminal, 4100 S. Laramie, P.O. Box 48,

Cicero, Illinois

Phone: Mr. L.E. Lacock Supt. 312-247-3378

Night Phone: 312-247-3378 or 312-652-2170

Two (2) 4" by 200' Booms 750 lbs

O. Marson Corp., 327 S. LaSalle St., Chicago, Ill.

Phone: John D. Harper 312-741-9047 (24 hrs)

Note: Equipment normally for hire

8" by 12' (1200') Booms 1500 lbs; 6" by 8' (1000') Booms, 1100 lbs

## COTP MILWAUKEE ZONE

A. Milwaukee Fire Department

750' slickbar boom with line throwing gun and truck.

Phone: 414-347-2323

Note: Boom not generally available for use outside of Milwaukee

## 7. COTP LUDINGTON ZONE

A. 500' of Slickbar oil boom at Muskegon, Mich. and 500' of the same type of boom at Ferrysburg, Mich. These were produced by local oil terminals, the Grand Trunk Western Railroad, and the city of Muskegon, and are primarily under the jurisdiction of Muskegon Fire Department.

## 8. COTP SAULT STE. MARIE ZONE

A. Standard Oil Co. depot at Sault Ste. Marie, Mich. One four-hundred foot (400'), Slickbar type oil boom.

#### COTP DULUTH ZONE

A. Murphy Oil Company
Superior Refinery Fuel Terminal
Superior, Wisconsin
Phone: 218-727-6862 (24-hour phone) Contact Walter Buck
Common carrier; military vehicle
130' slick bar oil boom with 4" float and 8" fin

B. Great Northern Refinery P.O. Box 3596 Pine Bend, Minnesota

Phone: 612-222-4721 (24 hour phone) Contact Jud Hester Common carrier, 24-hour service One slick bar oil boom with 6" float and 6" fin-5 lengths totaling 1,000 feet Portable surface pump Weight 300 lb. (approximate) 70-foot suction hose, discharge hose with flange connection

C. Lakehead Pipeline Co., Pier, Superior, Wis.
Phone: 398-6547 (Superior) Contact Charles Gilbert, Common Carrier;
Military vehicle
100' plastic oil boom

## 10. COTP TOLEDO ZONE

A. Gulf Oil Co., 2935 Front St., Toledo, Ohio Phone: 419-729-3871 400' 4 x 6 slickbar, chain weighted, 74 lbs per 100'

B. Standard Oil Co. Foot of Millard St. Toledo, Ohio Phone: 419-248-1461 300' 4 x 6 slickbar-chain weighted, 74 lbs per 100'

C. Buckeye Pipeline Co. Lima, Ohio Phone: 419-223-4015 200' triple weighted slickbar, 120 lbs per 100'

#### CHEMICALS

#### OSWEGO

A. St. Lawrence Seaway Dev. Corp. Massena, New York Phone: 315-764-0271 500 Gal. JANSOLV-60

B. Massena Fire Dept. Massena, New York Phone: 315-769-2464 10 Gal. "Foilzoil"

#### BUFFALO

A. American Oil Company McKee Road Rochester, New York 15 Gals. SLIX

B. Hess Oil Company 22 Cairn Street Rochester, New York 25 Gals. SLIX

C. Allied Oil Company Cranberry Street Erie, Pennsylvania 55 Gals. SLIX

D. United Oil Company Cranberry Street Erie, Pennsylvania 5 Gals. SLIX

E. Buffalo Fire Dept.
Phone: 716-854-1674 for the following
Dry Foam Powder
Two motor units - 1-1000 # unit and 500 gallons liquid foam at Greater Buffalo Airport
City of Buffalo Fire Boat
630 gallons high expansion foam

F. Buffalo CG Station Phone: 716-842-2191 21-5 gallon cans foam

G. USCGC BUCKTHORN Phone: 716-842-2045 13-5 gallon cans foam

H. USCGC OJIBWA Phone: 716-842-2046 11-5 gallon cans foam

#### CLEVELAND

A. Magnus Chemical 3199 W. 65th St. Cleveland, Ohio 44102 Phone: 216-631-7397 216-268-4040

Various chemicals and emulsifiers

B. Magnus Chemical 5100 W. 164st St. Cleveland, Ohio 44142 216-267-4506 216-243-1262 Oil Spill Disperser and Experts

C. Ekoperl 616 St. Clair Ave. NE. Cleveland, Ohio 44114 216-621-3210 Oil absorbent - large quantity

D. Alken - Murray Corp. 5156 Thornbury Blvd. Cleveland, Ohio 44124 216-771-8183 Liquid Dispersant

E. Yosemite Chemical Co. Akron, Ohio 216-762-2616 Spill - Away

#### 4. DETROIT

A. Marine Pollution Control Corp.
214 Randolph Street
Detroit, Michigan 48226
Mr. David Usher Home Phone: 313-548-1234
Office ": 313-931-1035
400 Gallons Oil disperser as well as other pollution control equipment

#### CHICAGO

A. Pure Oil Company
Mile 297.5
Lemont, Illinois
Mr. Gerharz Phone: 257-2201
Home: 257-2171
90,000 lbs. foam powder in 50 lb. pails
400 lbs, dry chemical powder.
105 Gal. 3% mechanical liquid foam

B. Texas Company West 2nd Street Box 200

Lockport, Illinois

Mr. J.R. Cutler Phone: 815-838-0770 Home: 815-838-0744

Mr. J.C. Jarratt Phone: 815-838-0770

Home: 815-838-1242

38,000 lbs. dry foam powder in 50 lb. pails 645 lbs. 3% mechanical liquid foam

C. Smith Oil Company
P.O. Box 5 West Market
Peru, Illinois
Mr. F. Tielman Phone: 815-223-3035
Spring Valley 3-0314 (nights)
100 5 Gal. pails 6% mechanical foam

D. Getz Fire Equipment Company
Phone: 309-673-0761
1615 West Adams
Peoria, Illinois
60 (5) Gal. cans 3% mechanical foam
50 Gals. Kiddle High Expansion Foam
5 Gals. Mine Safety foam.

E. Clark Oil and Refining Company
131 Street and Kedzie Avenue
Blue Island, Illinois
Mr. Schutz Pone: 285-5000 Ext 202
4700 lbs. of dry chemical
600 Bals. 3% liquid mechanical foam in 5 gal. cans
150 Gals. 6% mechanical foam
3850 lbs. 3% liquid mechanical foam
27,350 lbs. of 2+1 foam powder

F. Pure Oil Company 4801 South Harlem Avenue Chicago, Illinois Mr. Johnson: Phone: 484-7800 330 Gals. of 3% mechanical foam

G. Harlem Avenue Bridge
Lake River Terminal
Harlem Avenue, Bridge and Canal
Mr. Krestan Phone: B12-2300
200 Gals. 3% liquid foam

H. Standard Oil Company 4811 South Harlem Avenue Berwyn Illinois Mr. Fabray: Phone: 242-3480 125 Gals. 3% liquid foam. I. General American Tank Storage Terminal 67 Street and Archer Road Argo, Illinois

Mr. Ferry Phone: 581-2340 Home: 424-6683

Mr. MacDonals Phone: 581-2340

Home: 458-3281

70,100 lbs. (50 lb. pails) foam powder 22,440 lbs. (50 lb. pails) chemical powder

J. Charles R. Teas Co. Inc. 13825 South Indiana Avenue Chicago, Illinois

Mr. W.O. O'Conner Phone: 849-8840

Home: 233-5731

Mr. Teas Phone: Home: 849-2273

3,000 Gal. 3% mechanical foam 3,000 lbs. Purple K dry chemical 20,000 lbs. Plus 50 dry chemical

K. Walter Kidde and Co. Inc. 1314 West Randolph Street Chicago, Illinois Mr. Vonckx Phone: 252-1910 1,000 Gals. High Expansion Foam.

L. Mobil Oil Company 3821 Indianapolis Blvd. East Chicago, Indiana Phone: Mr. C. Smoljan 219-397-1950 8-40 Gal. Liquid Foam Carts

M. Sunshine Chemical Company
P.O. Box E.
Highland Park, Illinois 60035
Mr. Bill Katz Phone: 312-433-1145
Mr. Steve Kausman Phone: 203-232-9227
Various chemical and equipment for combating oil spills

N. The Texas Company 3600 Canal Street East Chicago, Illinois Mr. Eaton Phone: 219-397-0908 7,500 Gals. Foamite

O. Whiting Refinery Amer. Oil Co. 2400 New York Avenue c/o Fire Department Whiting, Indiana Mr. Kaminsky Phone: 219-659-2700 Ext 243 (1) truck with 2,000 lbs. dry chemical powder. P. Sinclair Refinery Company 3500 Indianapolis Blvd.

East Chicago, Indiana

Mr. Niemann Phone: 219-768-2866

Mr. Carpenter Phone: 219-398-0924

One 350 lb. Ansul dry powder 962 lb

One 150 lb. Ansul dry powder extinguisher 487 lbs.

Q. Able Fire and Safety Company

260 N. Fairfield

Chicago, Illinois

Mr. P. K. Nielsen Phone: 826-5555 (24 Hrs)

1,500 Gals. High Expansion Foam.

1,600 Gals. Rockwood Protein Foam.

2,600 lbs dry chemical powder

2,600 lbs Purple K powder

R. HI-EX Co.

1733 East 75th Street

Chicago, Illinois

Mr. O.J. Kelly Phone: 363-3877

Home: 798-5239

250 Gals. High Expansion Foam.

S. Humble Oil and Refining Co.

3301 So. California Ave.

Chicago, Ill.

Phone: Mr. Game Supt. (312) 523-8100

Night Phone: (312) 247-2615

42 Gals. liquid Corexit with spray gun

#### MILWAUKEE

A. Milwaukee Harbor Commission
Milwaukee, Wisconsin Phone: 414-276-9355

50 Gals. JANSOLV-60

B. Milwaukee Fire Department

Milwaukee, Wisconsin Phone: 414-276-9355

850 Gals. JANSOLV-60 Not available outside Milwaukee area.

C. American Oil Co.

Milwaukee, Wisconsin Phone: 414-273-6117

55 Gals. JANSOLV-60

D. Shell Oil Co.

Milwaukee, Wisconsin Phone: 414-271-8700

55 Gals. JANSOLV-60

E. Texaco Inc.

Milwaukee, Wisconsin Phone: 414-271-8110

55 Gals. JANSOLV-60

F. Illinois Chemical Co.
South Town Road
New Berlin, Wisconsin
Mr. Eugene Sperry Phone: 414-786-3651
Distributor for JANSOLV-60, 100 Gals. on hand.

G. Green Bay Fire Dept.
Green Bay, Wisconsin Phone: 414-435-4401
55 Gals. JANSOLV-60, with dispensor

#### 7. LUDINGTON

A. None

#### 8. SAULT STE. MARIE

A. None

#### 9. DULUTH

A. Duluth Air Force Base Fire Station Duluth, Minnesota Phone: 727-8211 (24 hrs) 3,000 Gals. of Liquid Foam in (5) Gal. cans.

#### 10. TOLEDO

A. USCGC TUPELO Phone: 419-254-6450 12-5 gal. cans foam.

B. Toledo Coast Guard Station Phone: 419-259-6448 5 Gals. foam

C. Toledo Fire Dept.
Toledo, Ohio Phone: 419-232-4141
2-(5) Gal. cans foam.

D. Gulf Oil Co. 2935 Fron Street Toledo, Ohio Phone: 419-729-3871 2-55 Gal. Drum JANSOLV-60 3-55 Gal. Drums SLIX

E. Standard Oil Co.
Millard Street
Toledo, Ohio Phone: 419-248-1416
2-55 Gal. Drums SLIX

F. Ashland Oil Co. 3147 Jessie St. Toledo, Ohio Phone: 419-726-2867 (5) 6-55 Gal. Drums SLIX G. Sun Oil Co. Hocking Valley Dock Front Street Toledo, Ohio Phone: 419-691-3561 (5) 55 Gal. Drums SLIX

H. American Shipbuilding Co. 2247 Front Street Toledo, Ohio Phone: 419-691-2475

I. Miller Oil Co. Fire extinguishers: Two 15 lb. CO<sub>2</sub>

J. Buckeye Pipeline Fire extinguishers: Three-150 lb. DC on wheels; fifteen-15 lb. DC

# ABSORBANTS, STRAW, HAY, SAWDUST, ETC.

#### OSWEGO

A. None

#### BUFFALO

A. Bailey Feed Co 1578 Clinton Street Phone: 716-822-6349 Hay and Straw \$1.10 per bale 300 to 400 bales on hand at all times

## CLEVELAND

A. Broadview Seed and Feed Co. Phone: 749-1221 100 bales straw or hay.

B. United Farmer Exchange Phone: 235-3172 100 bales straw or hay

C. Wilson Feed Mill Phone: 216-524-7080 100 bales straw or hay.

D. Herrman-Mclean Co. Phone: 216-771-1131 150 bales straw or hay

#### 4. DETROIT

A. Lazoen Hay and Feed Co. 26549 Lawrence Centerline, Mich. 200 bales straw, 200 bales hay

B. Marine Pollution Control Co. 214 Randloph Street Detroit, Mich. 400 lbs. Ecoperl oil absorbent (dry)

#### CHICAGO

A. Northwestern Salt and Feed Co. 1800 N. St. Louis Street Chicago, Illinois Phone: 317-772-7200 Straw - \$35 per ton. (May be delivered within 24 hrs)

#### MILWAUKEE

A. None

#### LUDINGTON

A. None

## SAULT STE. MARIE

A. None

#### DULUTH

A. B&B Feed and Grain Co.
2402 West Superior St.
Duluth, Minnesota
Phone: 722-9188 Contact Greg Birch - 715-392-2700 (home)
Hay and Straw, 50 bales @ .65 per bale.
50 1b bale, size 1 1½' x 1½ x 3½

B. Lepake Lumber Co.
4300 West 2nd St.
Duluth, Minnesota
Phone: 628-1011 - Bernard Lepake 724-1055 (Home)
@ .75 per bag \$20 truckload (sawdust) (delivered)
@ .65 per bag (picked up)
2 ton truckload - \$20 (15 cu. yds.)

#### 10. TOLEDO

A. The Andersons Mrs. Tucker Phone: 419-893-6551 or 419-882-3410 Hay

B. Mr. Richard Jacobs Phone: 472-1109 Sawdust

C. Creque Bros. 5050 S. Main Toledo, Ohio Phone: 419-536-1203 Hay

# OSWEGO

A. Camp Drum
Watertown, New York
Phone: 315-SU2 - 6900
Aircraft and Vehicles.

B. St. Lawrence Seaway Pilot Assoc. Cape Vincent, New York Phone: 315-014-4900 2 Launches.

C. St. Lawrence Seaway
Development Corp.
Massena, New York
Phone: 315-764-0271
Tug Robinson Bay
Barge and Crane
40' utility boat.

D. N.Y. State Police Station Theresa Road Watertown, N.Y. Phone: 315-782-2112 17' boat and scuba divers

E. Jefferson County Sheriff 311 N. Massey Street Watertown, N.Y. Phone: 315-788-1441 14' skiff and scuba diver

F. Association Island YMCA Henderson Harbor, New York Phone: 315-435-5022 56' LCM

G. Northern Yachts Inc.
Henderson Harbor, New York,
Phone: 315-435-5421
28' work boat
20 ton travel lift, underwater
welding equipment

H. Sodus Point Volunteer Fire Dept. Sodus Point, New York Phone: 315-483-9494 1 DUKW

- I. Stewart S. Sill Sr. Sodus Point, New York Phone: 315-483-7374 65' Tug (320HP) Crane, 6 salvage pumps 6 Portable pumps.
- J. Burcroff Marine Construction Inc. 146 Washington St. Puttneyville, New York Phone: 315-589-7131 78' tug (Marion) 36' tug
- K. Alexandria Bay Fire Dept. Alexandria Bay, New York Phone: 315-482-2345 1 Fire boat.
- L. Rogers Texaco Marina Alexandria Bay, New York Phone: 315-482-9461 Work boat and 3 salvage pumps.
- M. Hutchinsons Boat Works Alexandria Bay, New York Phone: 315-482-9931 1 work boat and 1 salvage pump.
- N. Bonnie Castle Marina Alexandria Bay, New York Phone: 315-482-9975 1 work boat and 1 salvage pump.
- O. Ogdensburg Fire Dept. Ogdensburg, New York Phone: 315-393-1010
- P. Ogdensburg Police Dept. Ogdensburg, New York Phone: 315-393-1551 16' boat.
- Q. Massena Fire Dept. Massena, New York Phone: 315-769-2464 1 DUKW
- R. Metropolitan Oil Company Massena, New York Phone: 315-764-0521 Tank trucks.

S. Oswego County Sheriff Dept. Oswego, New York Phone: 343-5490 or 343-8331 4 boats.

T. Oswego Fire Dept. 112 E. Bridge St. Oswego, New York Phone: 343-1313 6 Scuba divers.

U. Slyvan Beach State Police Slyvan Beach Slyvan Beach, New York Phone: PO2-4441 1 boat.

V. Pirates Cove Marina Phoenix, New York Phone: 695-8707 35' cruiser and 2 scuba divers.

# BUFFALO

A. None

# CLEVELAND

A. U.S. Army Corps of Engineers Phone: 216-621-7962 Barages.

B. U.S. Army Corps of Engineers Phone: 216-621-7962 (Benson Hanserman) via Harbor Master 216-621-3256 Ind. Waste Bureau 216-694-3320 Div. Water Poll. Control 2785 Broadway, Cleveland (Ray Rath) Cleveland, Fire Department 216-621-1212 Boats: Rowboat and 50' launch 4(40') 1(18' on trailer)

C. Scuba Diver John Bering Phone: 216-651-5322

## 4. DETROIT

A. Marine Pollution Control Co. 214 Randolph Street Detroit, Michigan Phone: 313-931-1035 1 36' x 12' work barge (self-propelled)

Permanent equipment aboard: 4 630 gal. Settling Tanks (barge has a 6000 gal. per hr. suction 1 Air Compressor 1 3" vaccumn pump and resvior 3 2" Cent. pumps 1 4" Cent. pump 1 3" Dia. pump 1 1" Air pump (with chemical propertion 100' various size hoses 1000' (36" length oil booms 4 skimmer adapters 1 2000 watt Generator 5 Walkie Talkies 1 Mobile Telephone 400 gals. oil dispersant 12' x 20' Debris hauling space 1 MSA Explosive meter 2 Lamb Sir movers 1 Air Cub oxygen unit 1 2 mask MSA fresh air hand operated unit 10 Buoy markers Allied equipment: 1 12' Stake truck with barrel hoist 1 1650 gal. Vacuum Tank Truck 1 1650 gal. Tank Truck with pump 3 4" Cent. pumps 1 Double trailer tanker unit (8500 gal. capacity) 1 27' Fiberglass hull power boat (twin screw) (for utility) UHF and VH radio, fathometer) 1 15' Outboard and oar powered Work Dingy

800' various sizes Suction hose 1000' various size discharger Mill hose

Lab. facilities to determine B.S. and W contents of petroleum products and flash points.

1.000 ft. Papper Cylinder boom material 200' Standard Slickbar.

#### CHICAGO 5.

American Oil Company Riley Road and Indiana Harbor Ship Canal, East Chicago, Ind. Phone: Mr. Windhauser 219-659-2700, Ext 214 FTS 219-932-5500 (Nights and Weekends) 219-397-4039 or 219-659-2700, Ext 343 One 16' with 92 H.P. Motor One air line throwing gun, 30 lb.

B. Cities Service Oil Co. Columbus Dr., East Chicago, Indiana Phone: Mr. McCarthy Phone: 219-397-656-Ext 342 Mr. Knight 219-397-6560 Ext 253 FTS 219-932-5500 Nights and Weekends 219-397-6560 (ask for foreman) One Row Boat and Trailer.

C. Mobil Oil Co., Indianapolis Blvd., East Chicago, Indiana Phone: Mr. Murray 219-932-5500

FTS 219-932-5500

Nights and Weekends 219-397-1950 (ask for foreman)

One Row Boat.

Two air line throwing guns, 30 lbs. each.

D. Shell Oil Co., Columbus Dr., East Chicago, Indiana

Phone: Mr. Austin 219-845-4502

FTS 219-932-5500

One Row Boat.

E. Humble Oil and Refining Co.

3301 So. California Ave.

Chicago, Ill.

Phone: Mr. Game, Supt., (312) 523-8100

Night Phone: (312) 247-2615

One 14' aluminum boat with 3½ H.P. motor, 105 lbs.

F. Walter Kidde and Co. Inc.

1314 S. Randolph St., Chicago, Ill.

Phone: Mr. Vonckx 352-1910

Two gasoline driver generators, 161 lbs. ea.

G. The Texas Co., 3600 Canal St., East Chicago, Indiana

Phone: Mr. Eaton: 210-397-0908 Two Foamite Generators, 300 lbs. ea.

H. Clarke Oil and Refining Co., 131 St. and Kedzie Ave.,

Blue Island, Ill.

Phone: Mr. Schultz 385-5000

Two portable generators

I. General American Tank, 67 St. and Archer Rd., Argo, Ill.

Phone: Mr. Ferry 381-2340

Home: 424-6683

Mr. McDonald 581-2340

Home: 458-3281

Six foam generators with hoppers

Six portable dry chemical extinguishers, 350 lbs. ea.

85 portable dry chemical extinguishers, 30 lbs. ea.

One 3" by 43' portable hydraulic foam tower (Type H-T33)

J. Pure Oil Co., Lemont, Ill.

Phone: Mr. Gerhary 257-2201

12 Foamite generators for mixing chemicals, 300 lbs. ea.

K. One (1) 12' Row boat

Phillips Pipeline Co., 400 E. Columbus, East Chicago, Indiana

Phone: Mr. Staton 219-397-6666

FTS 219-932-5500

Nights and Weekends 219-397-6666

L. One (1) Barge, tank class D. USCG, 10,000 gal. Seven (7) water craft, self prop.

Marsan Corp, 327 S. LaSalle St., Chicago, Ill.

Phone: John D. Harper 312-741-9047 (24 Hrs.)

Note: Equipment normally for hire

M. One (1) 12' boat with oars Texaco Co., 3600 Canal St., East Chicago, Ind. Phone: Mr. Eaton 219-397-0908 Nights and Weekends 219-838-8881

N. Four (4) Mobile, Four (4) portable, 153.230 MC American Oil Co., Riley Rd. and Ind. Harbor Ship Canal, East Chicago, Ind. Phone: 219-659-2700 Ext. 214 or 216 FTS 219-932-5500 Nights and Weekends 219-397-4039 or 219-659-2700 Ext. 343.

O. Five (5), 158.310 MC Mobile units Cities Service Oil Co., Columbus Dr., East Chicago, Ind. Phone: Mr. McCarty 219-397-6560, Ext. 342 Mr. Knight 219-397-6560, Ext 253 FTS 219-932-5500 Nights and Weekends 219-397-6560 (ask for foreman)

P. Five (5) Mobile, Three (3) portable, 153.110 MC Mobile 0il Co., 3821 Indianapolis Blvd., East Chicago, Ind. Phone: Mr. Murray 219-397-1950 FTS 219-932-5500 Nights and Weekends 219-397-1950 (ask for foreman)

Q. Two (2) portable units, 26.72 and 27.175 MC Phillips Pipeline Co., 400 E. Columbus, East Chicago, Ind. Phone: Mr. Stanton 219-397-6666 FTS 219-932-5500 Nights and Weekends 219-397-6666 (ask for leadman)

R. Several Mobile, Twenty (20 Portable Units 153.17 MC Sinclair Refining Co., 3500 Indianapolis Blvd., East Chicago, Ind. Phone: 219-397-0924 (ask for shift foreman) FTS 219-932-5500

S. Mr. George A. Hale Skokie, Ill. Phone: 312-677-6200 (Days) Nights and Weekends) 312-257-2171

T. Mr. G.J. Gerharz, Lemont, Ill. Phone: 312-257-2201 (Days)
Nights and Weekends 312-257-2171

U. One (1) air powered line throwing gun Texaco Co., 3600 Canal St., East Chicago, Ind. Phone: Mr. Eaton 219-397-0908 Nights and Weekends 219-838-8881

V. Three (3) straw mulchers, Tinn type, 800 lbs. ea.
One (1) Harvester for oil soaked straw, 3200 lbs.
Three (3) inflatable bags, 900 gal. rubber, Goodyear, 250 lb. ea.
The Marsan Corp., 327 S. LaSalle St., Chicago, Ill.
Phone: John D. Harper 312-741-9047 (24 hrs.)
Note: Equipment normally for hire

### MILWAUKEE

A. Milwaukee Harbor Commission
Milwaukee, Wisconsin
Phone: 414-276-9355
45' tug with JANSOLV 60 and spraying equipment.

B. Wisconsin Department of Natural Resources Madison, Wisconsin Phone: 608-266-3221 Oil testing equipment.

### LUDINGTON

A. None

### 8. SAULT STE. MARIE

A. None

## 9. DULUTH

A. Marine Fueling, Inc.
Foot of Hill Avenue
Superior, Wisconsin
Phone: 727-3380 (Sig Mattson-525-1601 (Home Phone)
One Self-propelled tank barge WILLIAM H. BENNETT
64,000 gal. capacity, grades D and E Pumping capacity 1,050 gal./min.
Non-self-propelled tank barge K-10 13,000 gal. capacity grades
D and E Pumping capacity 60 gal./min.
2,000 gal. tank truck with pumping equipment.

B. Murphy Oil Co.
Superior Refinery
Superior, Wisconsin
Walter Buck Phone: 727-6828 (24 hour phone)
2000 gal. tank truck with pumping equipment

C. Great Northern Refinery
P.O. Box 3596
Pine Bend, Minnesota
Jud Hester, Plant Supervisor
Phone: 612-222-4721 (24 Hour phone)
Common carrier, 24 hour service
Portable surface pump
Weight 300 lbs. (approximate)
70 foot suction hose, discharge hose with flange connection.

## 10. TOLEDO

A. Toledo Police Department
Toledo, Ohio 43604
Phone: 419-241-1221
One 26' boat equipped with a P-500 Pump (max wt. 200 lbs) (capacity 500 GPM at 100 PSI large colume medium pressure)
Hose: 100 feet of 1½ - all purpose nozzle
Varying supply of a chemical emulsifying agent for dispersal of oil spills. (20 gals. cover 1000 square feet)

B. Toledo Fire Department
Toledo, Ohio 43604
Phone: 419-232-4141
One Fire Boat
Hose 300 ft. 2½" hose; 300 ft. 1½" hose.
1 foam eductor
foam 2 - 5 gal cans.

C. Gulf Oil Co.
2935 Front Street, Toledo, Ohio
Phone: 419-729-3871
Hose: 1200 feet 2½"
One fully equipped fire truck.
One 350 lbs DC
One 12' aluminum rowboat
One fixed air drive

# TOLEDO (Cont'd)

D. Shell Oil Co.

2844 Summit Street, Toledo, Ohio

Phone: 419-726-0565

Fixed Systems: Chemical foam - 27,000 gal.

(2) hose: 400'.

Standard Oil Co.

Foot of Millard Street, Toledo, Ohio

Phone: 419-248-1461

Fixed Systems: Chemical foam-2100 1b type B.

Hose: 700' 25"

F. Ashland Oil Co.

3147 Jessie Street, Toledo, Ohio

Phone: 419-726-2867

Fixed Systems: Chemical foam - 1445 gal. type A.

1445 gal. type B. Dry Chemical - 750 gal. single type.

Hose: 200 feet 25"

G. Commercial Oil Service

5911 Seaman Rd. Toledo, Ohio

Phone: 419-836-3694 or 691-0617

4 tank trucks

1 each 5.700 gal.

2 each 1,600 gal.

1 each 2,600 gal.

1 each 1,600 gal.

1 gear pump 2" - 3" suction

(Portable - can be used with Item #3)

10 ft perforated vacuum pipe for oil pick-up

H. Sun Oil Co.

Toledo, Ohio

(4) 12 foot aluminum hand propelled boats for handling slix

bar spill boom

#### SKIMMERS AND VACUUM TRUCKS

## L. OSWEGO

A. None

#### BUFFALO

A. Bethlehem Steel Co. 3535 Lakeshore Lawawana, New York One 300 floating type gasoline driven One 55 GPH conveyer type

### CHICAGO

A. American Oil Co. 2400 New York Ave. Whiting Indiana Phone: Mr. Kaminsky (219-659-2700) One vacuum pickup truck 2 tons.

B. Clark Oil Co. 131 st. and Kedzie Ave. Blue Island Illinois Phone: Mr. Schultz (385-5000) One vacuum pickup truck 2 ton

C. Howard Morris Inc.
6153 Columbia Ave.
Hammond, Indiana
Mr. Truppe 219-933-7466
Mr. Smith 312-734-5889
Available for rent 24 hrs a day. (Fee includes 3 operators)
One vacuum truck 200 H.P.

D. American Oil Co.
East Chicago, Indiana
Mr. Windhauser 219-659-2700 ext 216
Nights and Weekends 219-397-4039
Not always available
One vacuum truck 22,760 lbs.
One self-propelled skimmer 2,750 lbs.

# CHICAGO (Cont'd)

E. Self propelled skimmer
American Oil Co. Riley Rd. and Ind. Harbor Ship
Canal, East Chicago, Ind.
Phone: Mr. Windhauser 219-659-2700 ext. 216
FTS 219-932-5500
Nights and Weekends: 219-397-4039 or 219-659-2700 ext 343

F. One (1) oil skimmer, 750 lbs.;
Two (2) tank trucks, 2000 gals. capacity.
One (1) vacuum truck, 1000 gals. capacity;
Eighty (80) tons straw, long wheat
The Marson Corporation, 327 S. La Salle St.
Chicago, Ill.
Phone: John D. Harper 312-741-9047 (24 hrs)
Note: Equipment normally for hire

### 4. CLEVELAND

A. Hirth Oil Co. 2890 E. 83rd 7 trucks (4500 gals.) and pumps

B. USHER Waste 0il2205 W. 3rd216-861-190710 trucks (5-8000 gal.) and pumps

C. P and K Oil Service
6929 Detroit Ave.
216-961-6496
4 trucks (1500 gal) and pumps

D. Shell Oil
2201 W. 3rd
216-861-6509
10 trucks (8-9000 gal.)

E. Harbor Commissioner 216-694-3390 One floating Skimmer

F. Gulf Oil Co. Inc 250 Jefferson Ave. Cleveland, Ohio 44113 Phone: 216-861-0755 7 tank trucks

## DETROIT

A. Ford River Rouge Plant One floating type skimmer, Transportable by air

B. Marine Pollution Control Corp.
214 Randolph Street
Detroit, Michigan
One floating type skimmer
Transportable by truck but not by air

# 6. DULUTH

A. None

## LUDINGTON

A. None

## MILWAUKEE

A. None

# SAULT STE MARIE

A. None

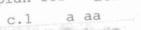
# 10. TOLEDO

A. Sun Oil Co. One portable electric explosion proof floating saucer skimmer LABORATORY LIBRARY
\*96936000119206\*

Date Due

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MOE/LAK ERIE/ATKK
Ontario Water Resources Co
Lake Erie
contingency plan for atkk





125 Hesourceo Rd. Etobicoke, Ontario MSP 3V8 Canada